

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of

5GAA Petition For Waiver To Allow Deployment  
Of Cellular Vehicle-To-Everything (C-V2X)  
Technology In The 5.9 GHz Band

GN Docket No. 18-357

**COMMENTS OF AMERICAN HONDA MOTOR CO., INC.**

American Honda Motor Co., Inc. (“Honda”) is pleased to submit these comments in support of the 5GAA Waiver Request.<sup>1</sup> A grant of 5GAA’s Waiver Request will permit the deployment of wireless Vehicle-to-Everything (“V2X”) technology that can provide safer travel and improve traffic flow on America’s roadways. By allowing for both Cellular Vehicle to Everything (“C-V2X”) and Dedicated Short Range Communications (“DSRC”) technology operations, the Commission will allow the automotive marketplace to select the preferred V2X technology. This approach is consistent with the technology neutral position of the U.S. Department of Transportation.

Honda has been investing and manufacturing in the U.S. for 40 years. This investment includes \$27.4 billion in purchases of parts and materials from 624 U.S. suppliers in 2017 alone. In addition, Honda has invested \$5.9 billion over the past five years to produce passenger vehicles, power equipment, and power sports products at our 12 manufacturing facilities located

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<sup>1</sup> See *5G Automotive Association Petition For Waiver to Allow Deployment of Intelligent Transportation System Cellular Vehicle to Everything (C-V2X) Technology*, GN Docket No. 18-357 (filed Nov. 21, 2018) (the “Waiver Request”); see also *Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Comment On 5GAA Petition For Waiver To Allow Deployment Of Cellular Vehicle-To-Everything (C-V2X) Technology In The 5.9 GHz Band*, Public Notice, DA-18-1231, GN Docket No. 18-357 (Dec. 6, 2018).

in the United States. The U.S. is also home to the global headquarters for HondaJet. All told, Honda and its subsidiaries directly employ 31,000 Americans in 75 facilities and offices across the country.<sup>2</sup>

V2X connectivity is an integral piece of Honda's vision of a collision-free future.<sup>3</sup> As discussed further below, Honda is actively developing V2X collision-avoidance applications, such as SAFE SWARM, to run on the 5.9 GHz spectrum band to provide vehicles with the ability to safely and efficiently move.<sup>4</sup> These technologies are being developed and tested in the U.S. with the goal of reducing the high number of traffic fatalities on America's roads each year.<sup>5</sup>

#### **I. Honda is Developing Promising V2X Applications that Utilize the 5.9 GHz Band**

Honda remains excited about the benefits of V2X applications. Honda's latest innovation in V2X applications is the development of SAFE SWARM. Inspired by the fluidity of a swimming school of fish, SAFE SWARM enables vehicles to share information about road conditions and prevents traffic congestion by assisting drivers with merging and lane changes by analyzing the speeds of vehicles in the nearby proximity.

Honda is testing SAFE SWARM as part of the 33 Smart Mobility Corridor along State Route 33 in Marysville, Ohio in partnership with the Ohio Department of Transportation and the Ohio State University, among others. Members of Honda's team in Ohio will equip their

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<sup>2</sup> See Honda in America, *Data Points*, <https://hondainamerica.com/investment/#data-points> (last visited Jan. 17, 2019).

<sup>3</sup> See Honda, *Our Collision-Free Future*, <https://www.honda.com/safety> (last visited Jan. 17, 2019).

<sup>4</sup> See Honda, *Honda SAFE SWARM™*, <https://hondanews.com/releases/ces-2019-honda-creates-new-categories-of-technology-to-enhance-work-offer-convenience-reduce-carbon-and-save-lives/videos> (last visited Jan. 17, 2019).

<sup>5</sup> See National Highway Traffic Safety Administration, *Early Estimate of Motor Vehicle Traffic Fatalities for the First Half (Jan-Jun) of 2018* (Oct. 2018), <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812629>.

vehicles with communications technology to “speak” with both other vehicles and the infrastructure to achieve the goals of SAFE SWARM.

Additionally, Honda has been developing additional V2X communications safety applications to protect other road users, including pedestrians and motorcyclists,<sup>6</sup> as well as applications to make intersections safer.<sup>7</sup>

All of these V2X safety applications depend on access to the 5.9 GHz spectrum band. Granting 5GAA’s Waiver Request will provide Honda and other V2X stakeholders with a better ability to test and eventually deploy these safety applications using the technology it determines best suited to support these applications.

## **II. The Commission Should Grant This Waiver to Accelerate the Realization of the Benefits of V2X Technology by U.S. Consumers**

A grant of the 5GAA Waiver Request would accomplish two important road safety goals. First, allowing for the deployment of both DSRC and C-V2X technology for V2X applications will likely speed the availability of these applications in the marketplace. While Honda continues to assess both technologies to determine if either technology has any benefits for specific applications, the ability to test and deploy these technologies, whether by Honda or other market participants, will help to accelerate this assessment.

Second, a grant of the waiver would help to facilitate the global harmonization of V2X spectrum usage. Last summer, China announced that it would move forward in designating

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<sup>6</sup> See Honda, *Honda Demonstrates Advanced Vehicle-to-Pedestrian and Vehicle-to-Motorcycle Safety Technologies*, <https://hondanews.com/channels/corporate/releases/honda-demonstrates-advanced-vehicle-to-pedestrian-and-vehicle-to-motorcycle-safety-technologies/videos/honda-demonstrates-advanced-vehicle-to-pedestrian-and-vehicle-to-motorcycle-safety-technologies> (last visited Jan. 17, 2019).

<sup>7</sup> See Press Release, Honda, *Honda Demonstrates New “Smart Intersection” Technology* (Oct. 4, 2018), <https://csr.honda.com/2018/10/04/honda-demonstrates-new-smart-intersection-technology>.



5905-5925 MHz frequency for V2X technologies.<sup>8</sup> As a company with a global vehicle footprint, Honda believes that global spectrum harmonization would encourage large scale deployment faster than not, therefore saving more lives. If each safety application has to be tested and tuned for different frequencies in different countries, deployment could be delayed.

### CONCLUSION

For the reasons described above, Honda encourages the FCC to approve the 5GAA Waiver Request so that Americans can experience the safety benefits of V2X technology without delay.

Respectfully submitted,

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<sup>8</sup> See Edward Au, *China's Connected Car f-band; IEEE 802.11 on NextGen V2X*, IEEE Vehicular Technology Society, Aug. 7, 2018, <https://vtsociety.org/2018/08/chinas-connected-car-f-band-ieee-802-11-on-nextgen-v2x>.